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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,081	12/31/2003	Lyonel Renaud	42P18013	2079

8791 7590 04/25/2007
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LOS ANGELES, CA 90025-1030

EXAMINER

AHN, SAM K

ART UNIT	PAPER NUMBER
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2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/750,081

Applicant(s)

RENAUD ET AL.

Examiner

Sam K. Ahn

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-16 is/are rejected.
- 7) ☒ Claim(s) 1-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 050905,060605,093005
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, *the "multiplexer circuit ... a control input coupled to the output of the comparator circuit" as recited in claim 10* must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1-16 are objected to because of the following informalities:

In claims 1 and 5, define the variable "M".

In claim 3, lines 1-2, define "PCI Express COM".

In claim 5, line 11, "the comparator part" should be "the comparator circuit".

In claim 9, line 2, "COMma" should be "COM (comma)".

In claim 10, line 5, define "I/O", lines 9-10, "the root complex" should be "a root complex", line 18, "the comparator part" should be "the comparator circuit".

In claim 11, line 2, "the comparator part" should be "the comparator circuit".

In claim 16, line 1, define "I/O".

Claims 2,4,6-8,12-15 directly or indirectly depend on claim 1,5 or 10. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 10-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 10 recites an alignment logic incorporating a multiplexer circuit, which appears to be the element 420 in Fig.4B of the instant application. The multiplexer circuit is coupled to the output of the M storage banks, output of element 404 in Fig.4A. And the control input of the multiplexer circuit is coupled to the Priority Encoder 416. However, the claim recites "*the multiplexer circuit having ... a control input coupled to the output of the comparator circuit*".

The specification of the instant application discloses, in paragraph 0029, "*The output of the encoder 416 is coupled to control the output of a multiplexer 420, being a M bit symbol now*".

Hence, the specification describes that the Priority Encoder outputting the M bit symbol is coupled to the control input of the multiplexer circuit. The specification does not describe in such a way as to reasonably convey to one skilled in the art of how the multiplexer circuit having a control input is coupled to the output of the comparator circuit 408 and 412 in Fig.4A, as claimed.

Claims 11-16 directly or indirectly depend on claim 10.

Allowable Subject Matter

4. Claims 1-9 would be allowable if rewritten or amended to overcome the claim objections, set forth in this Office action.
5. The following is a statement of reasons for the indication of allowable subject matter: present application discloses a method and an apparatus of receiving bits between devices of symbol alignment. An IC comprises circuitry for symbol alignment of first

and second bit streams offset by a bit and comparing with a non-data symbol.

However, prior art does not explicitly teach after the comparing step and asserting a flag, determining that the bits following the symbol alignment are training sequence that has an instance of the non-data symbol, and removing the flag if no training sequence is detected. Furthermore, prior art does not teach a priority encoder receiving lock signals from a comparator circuit and providing the output a multiplexer, wherein the multiplexer further receives bits from M storage banks.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Allen US 2004/0264612 A1 teaches a clock and data recovery circuit incorporating in a PCI Express environment comprising symbol alignment circuitry. Note its provisional application 60/451,799.

Evoy US 2006/0209735 A1 teaches realignment circuitry of multiple serial bits comprising symbol alignment circuitry, shift registers and comparing circuitry.

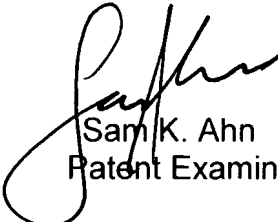
Note its provisional application 60/494,294.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Ahn whose telephone number is (571) 272-3044. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sam K. Ahn
Patent Examiner
4/4/07